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# EG&G ROCKY FLATS

EG&G ROCKY FLATS, INC.  
ROCKY FLATS PLANT, P.O. BOX 464, GOLDEN, COLORADO 80402-0464 • (303) 966-7000

May 3, 1991



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91-RF-223

000023358

Robert M. Nelson, Jr.  
Manager  
DOE, RFO

Attn: R. J. Schassburger

U. S. ARMY CORPS OF ENGINEERS SECTION 404 DETERMINATION FOR SOUTH WALNUT CREEK BASIN (OPERABLE UNIT NO. 2) - JMK-0031-91

Attached is a draft letter, with appropriate attachments, to Mr. Terry McKee, U.S. Army Corps of Engineers (Corps), requesting a determination (and permit if needed) of whether the interim action discussed in the *Surface Water Interim Measures/Interim Remedial Action Plan/Environmental Assessment and Decision Document, South Walnut Creek Basin, Operable Unit No. 2* requires a Section 404 permit. This project was discussed informally with Mr. McKee.

It should be noted that the project is driven by an IAG milestone that requires the project to be operational by May 13, 1991.

This information was transmitted informally to Mr. Scott Grace on April 18, 1991. Please work directly with my staff to finalize the transmittal to the Corps. Call Ms. Kathy London at 273-6189 or Mr. Scott McGlochlin at 273-6190 if you have any questions.

*J. M. Kersh*  
J. M. Kersh  
Associate General Manager  
Environmental and Waste Management

SCM:bmb

Orig. and 1 cc - R. M. Nelson, Jr.

Attachments:  
As Stated

DIST.	LTR	ENC
BRETZKE, J.C.		
BURLINGAME, A.H.		
COPP, R.D.		
CROUCHER, D.W.		
DAVIS, J.G.		
EVERED, J.E.		
FERRERA, D.W.		
FERRIS, L.R.		
FRAIKOR, F.J.		
FRANCIS, G.E.		
GOODWIN, R.		
HEALY, T.J.		
IDEKER, E.H.		
JENS, J.P.		
KEELE, P.B.		
KERSH, J.M.		
KIRBY, W.A.		
KIRKEBO, J.A.		
LEE, E.M.		
MAJESTIC, J.R.		
MATHEWS, T.A.		
MEURRENS, B.E.		
MORGAN, R.V.		
NORTH, P.		
PALMER, L.A.		
POTTER, G.L.		
PIZZITO, V.M.		
RHOADES, J.I.		
SAFFELL, B.E.		
SWANSON, F.R.		
WIEBE, J.S.		
WILKINSON, R.B.		
WILLIAMS, R.E.		
WILSON, J.M.		
YOUNG, E.R.		
ZANE, J.O.		

FRICK, L.J.U.	X	
RENO, C.D.	X	X
McGlochlin, S.	X	X
London, K.	X	X
Grace, D.	X	X
Nelson, R.	X	X
Shaw, D.	X	X
Butler, S.	X	Y
FRWM	X	X
CORRES CONTROL	X	X
TRAFFIC		

CLASSIFICATION:

UNCLASSIFIED	X	X
CONFIDENTIAL	X	X
SECRET		

AUTHORIZED CLASSIFIER

SIGNATURE: *[Signature]*  
4/18/91

DATE: *[Signature]* 5/13/91  
IN REPLY TO LTR NO.

PC#  
LTR APPROVALS:  
L.J.O.F. *[Signature]*  
J.E.F. *[Signature]*  
ORIG & TYPE INITIALS

Mr. Terry McKee  
 Department of the Army  
 Corps of Engineers, Omaha District  
 Tri-Lakes Project Office  
 9307 State Hwy 121  
 Littleton, Colorado 80123-6901

Dear Mr. McKee:

The Department of Energy (DOE) is forwarding the attached information, including maps and drawings, to your office for review. Please provide a determination as to whether the following action is covered under a Section 404 Nationwide Permit, pursuant to 33 CFR 330.5(a)(20).

The project is the installation and operation of a surface water collection system. The three locations at which water will be collected (using a below-ground sump/weir combination) are a contaminated seep (or immediately downstream at confluence points) and two in-stream locations (one is the discharge from a buried culvert) on South Walnut Creek, upstream from the existing retention ponds (Ponds B-1 to B-5). The collected water will be transported by truck and/or pipeline to a wastewater treatment facility, processed through the treatment facility and released to South Walnut Creek. This is an interim action under RCRA and CERCLA that will mitigate downgradient contaminant migration within surface water.

A chemical precipitation with cross-flow membrane filtration system, together with a granular activated carbon adsorption system, has been selected as the preferred treatment technology. This will allow for discharge of the treated water in compliance with state and federal water standards. The treated water will be discharged to South Walnut Creek, immediately downstream of the last contaminated surface water collection point. Treated water will be monitored to ensure contaminants are within regulatory requirements.

The three stations are identified as CS-59, CS-61, and CS-132. The estimated quantities of fill and approximate surface areas impacted by installation of the three sumps/weirs, with corresponding ditch modifications, follow:

Station	Fill Quantity (yd <sup>3</sup> )	Fill Type	Area Impacted (ft <sup>2</sup> /acres)
CS-59	< 0.3	Sand/Bentonite Mix	10/0.0003
	< 0.4	Pre-cast Concrete	
CS-61	< 0.3	Sand/Bentonite Mix	12/0.0003
	< 0.4	Pre-cast Concrete	
CS-132	< 0.3	Sand/Bentonite Mix	12/0.0003
	< 0.4	Pre-cast Concrete	

A wooden box enclosing the sump will be placed over each weir.

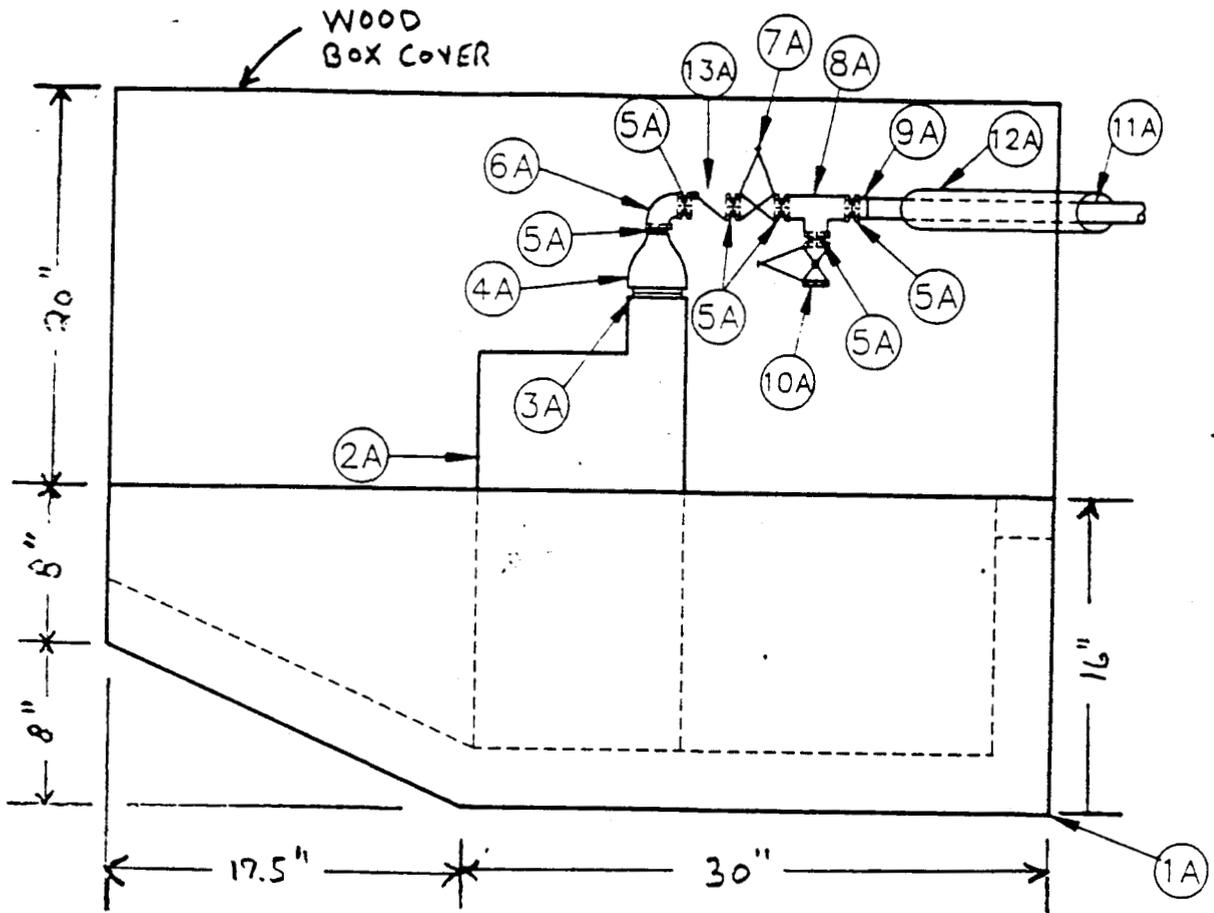
The potential impacts to wetlands are attributed to removing the water from the channel at Stations CS-59 and CS-61 and reintroducing the water downstream of CS-132. This could potentially dry up the stream channel between Stations CS-59/CS-61 and CS-132 with subsequent loss of wetland vegetation. It should be noted that flows exceeding the withdrawal rate for these stations (CS-59, 4.5 gpm and CS-61, 38 gpm) will overtop the weirs and proceed downstream. These occurrences plus precipitation may be sufficient to support the wetland vegetation. There are three areas of wetlands between CS-59/61 and CS-132. Combined these wetlands total approximately 0.06 acres.

All stations are located in Section 11, Township 2 South, Range 70 West, Jefferson County, Colorado. Figures 1 and 2 are drawings of the sump/weir combinations, Figures 3, 4, 5, and 6 show the areas and relative locations of the wetlands, Figure 7 shows the location of the sumps/weirs, and Figure 8 is a USGS Louisville Quadrangle map showing the location of the plant including locations of the collection sites. Please note that the USGS Quad map is not up-to-date. For example, Pond B-5 is not shown on the Quad map.

Please call Mr. Scott Grace at 966-7199 if you have any questions.

R. M. Nelson, Jr.  
Manager

FIGURE 1



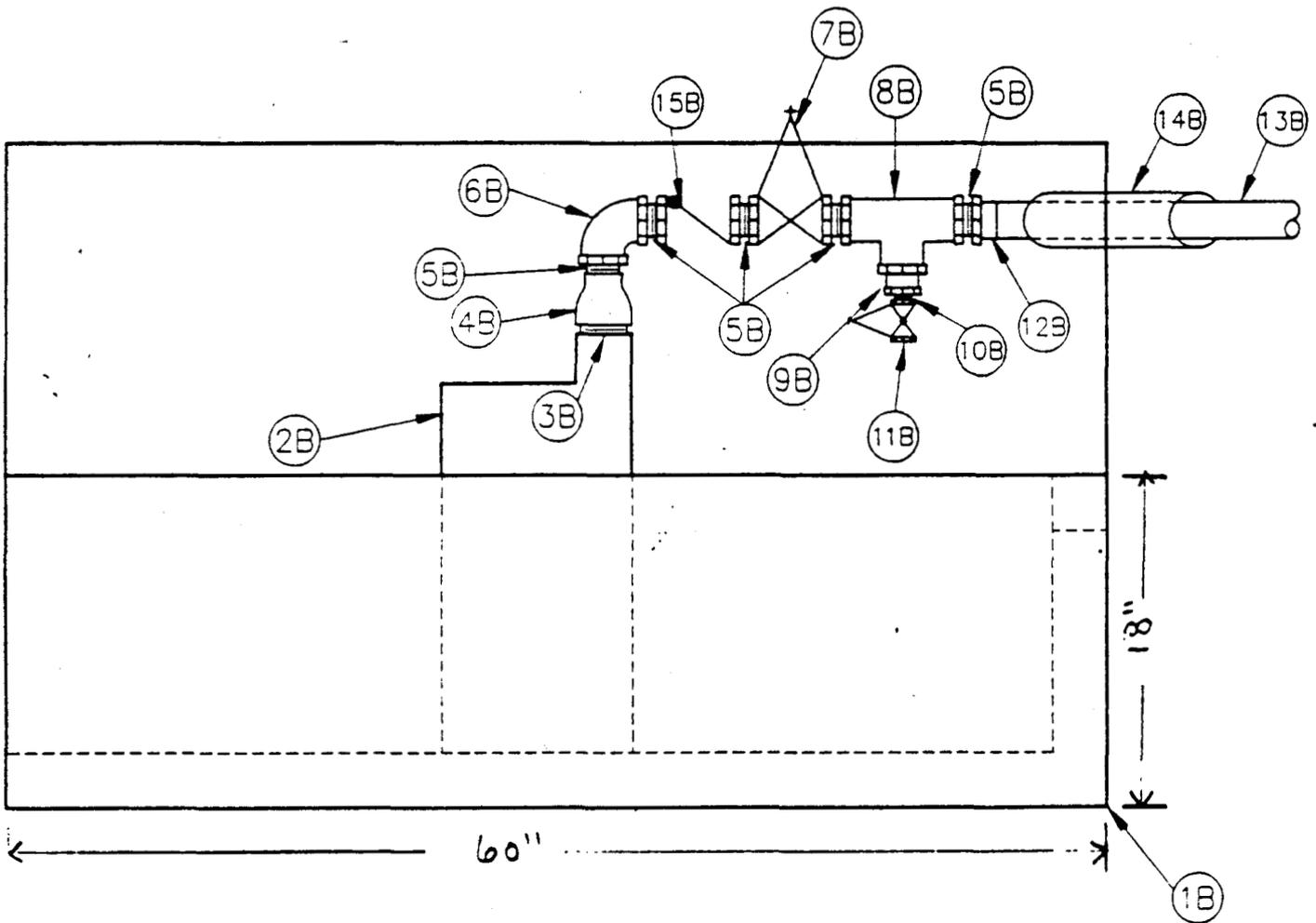
NOTE 1: Sump Width is 28 inches (Max)

## WEIR CS-59 ELEVATION

Scale: 1" = 10'

HM

FIGURE 2



# WEIR CS-61 AND WEIR CS-132

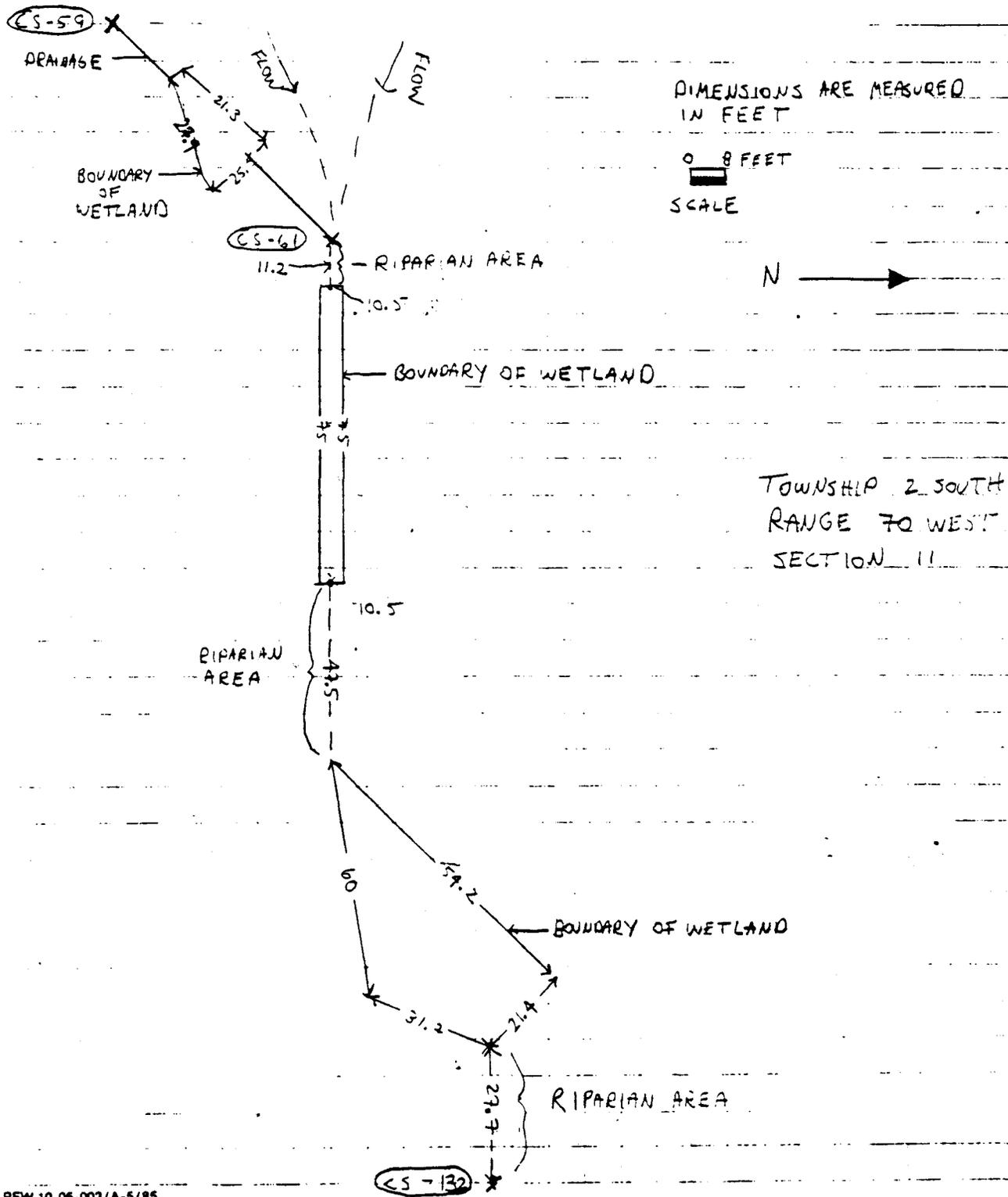
Scale: 1" = 10"

Note 1: Sump Width is 28" (Max)

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FIGURE 3

PROPOSED LOCATION OF SURFACE WATER COLLECTION SYSTEMS SOUTH WALNUT CREEK



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FIGURE 4

SOUTH WALNUT CREEK BASIN  
WETLAND DOWNGRADEMENT OF CS-59

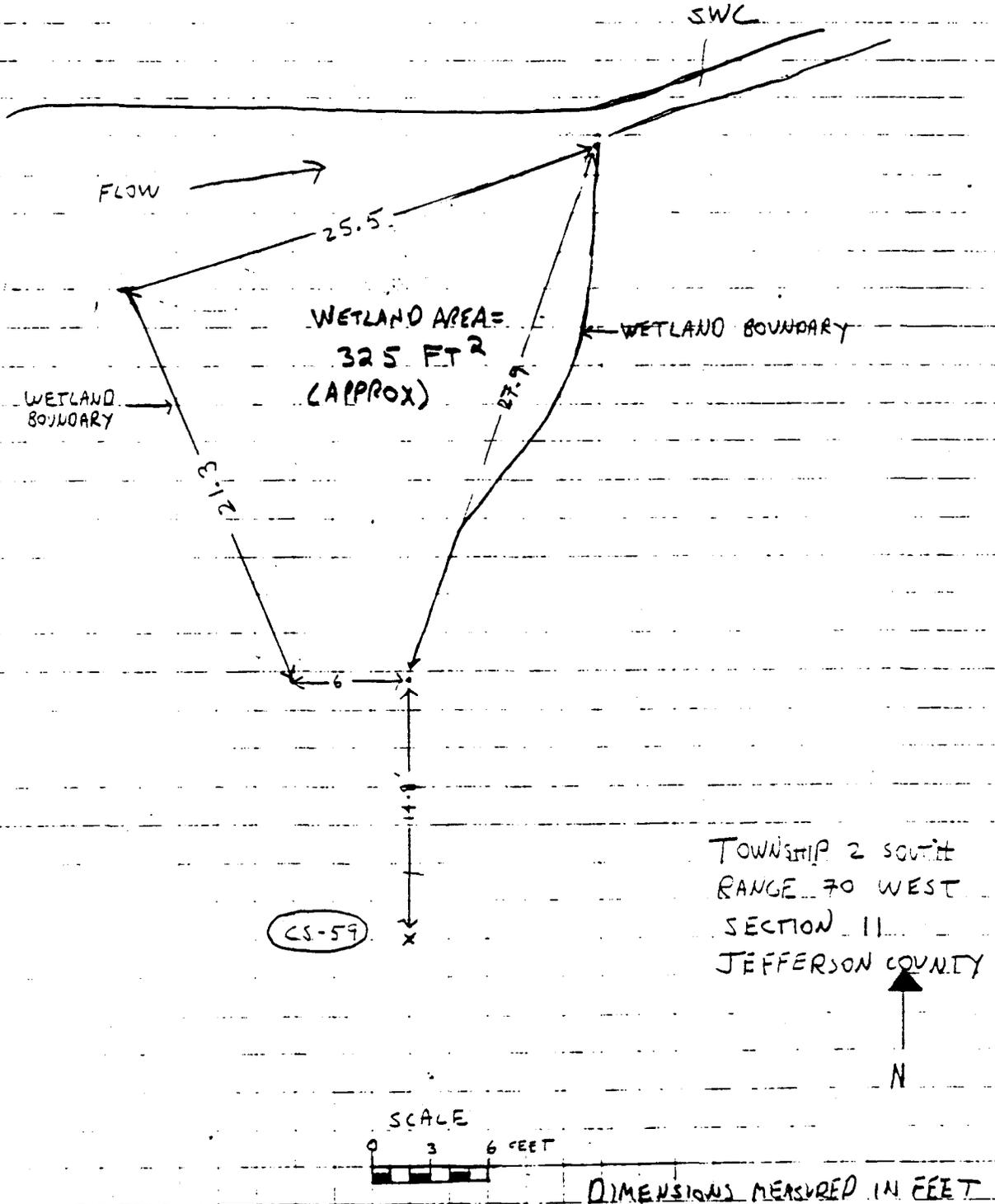


FIGURE 5

WETLAND UPGRADIENT OF CS-132  
SOUTH WALNUT CREEK BASIN

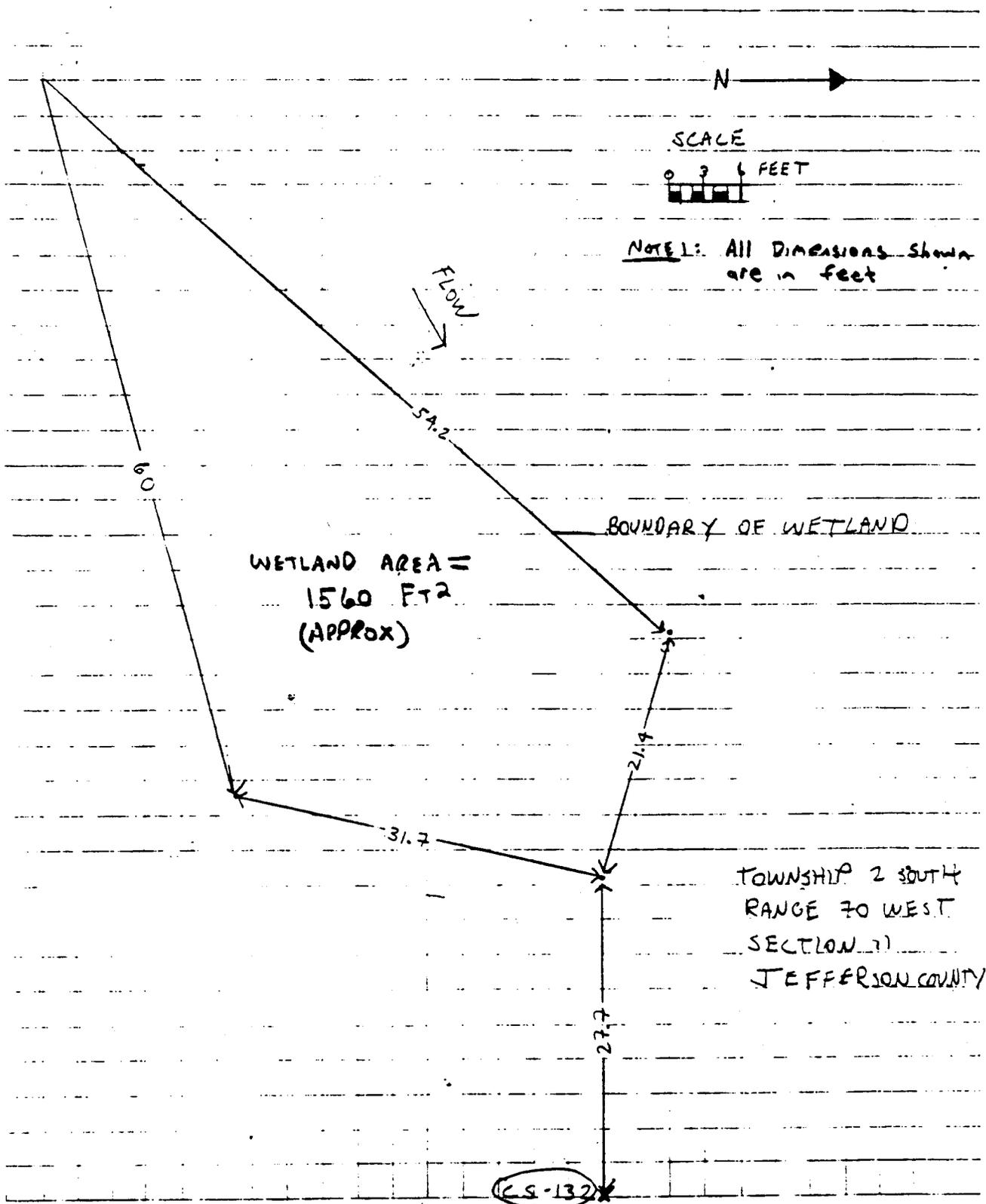
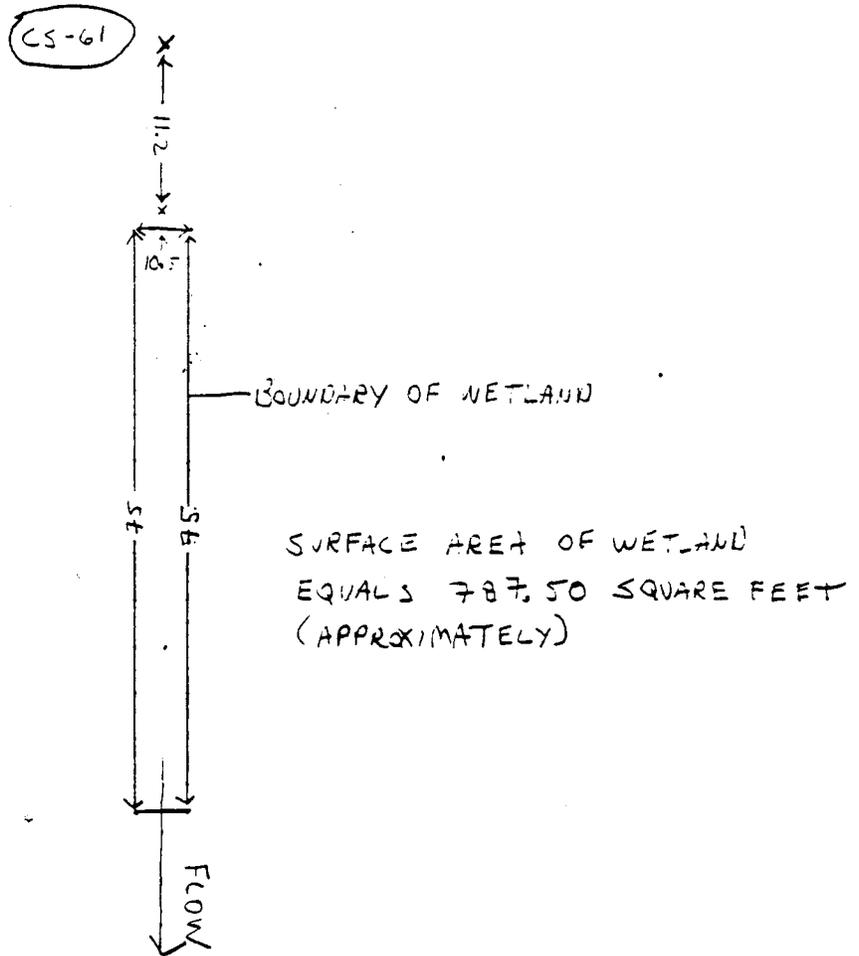


FIGURE 6

SOUTH WALNUT CREEK BASIN  
WETLAND DOWNGRAIENT OF CS-61



DIMENSIONS ARE MEASURED  
IN FEET

TOWNSHIP 2 SOUTH  
RANGE 75 WEST  
SECTION 11  
JEFFERSON COUNTY

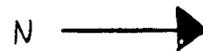
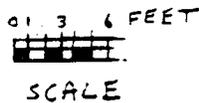
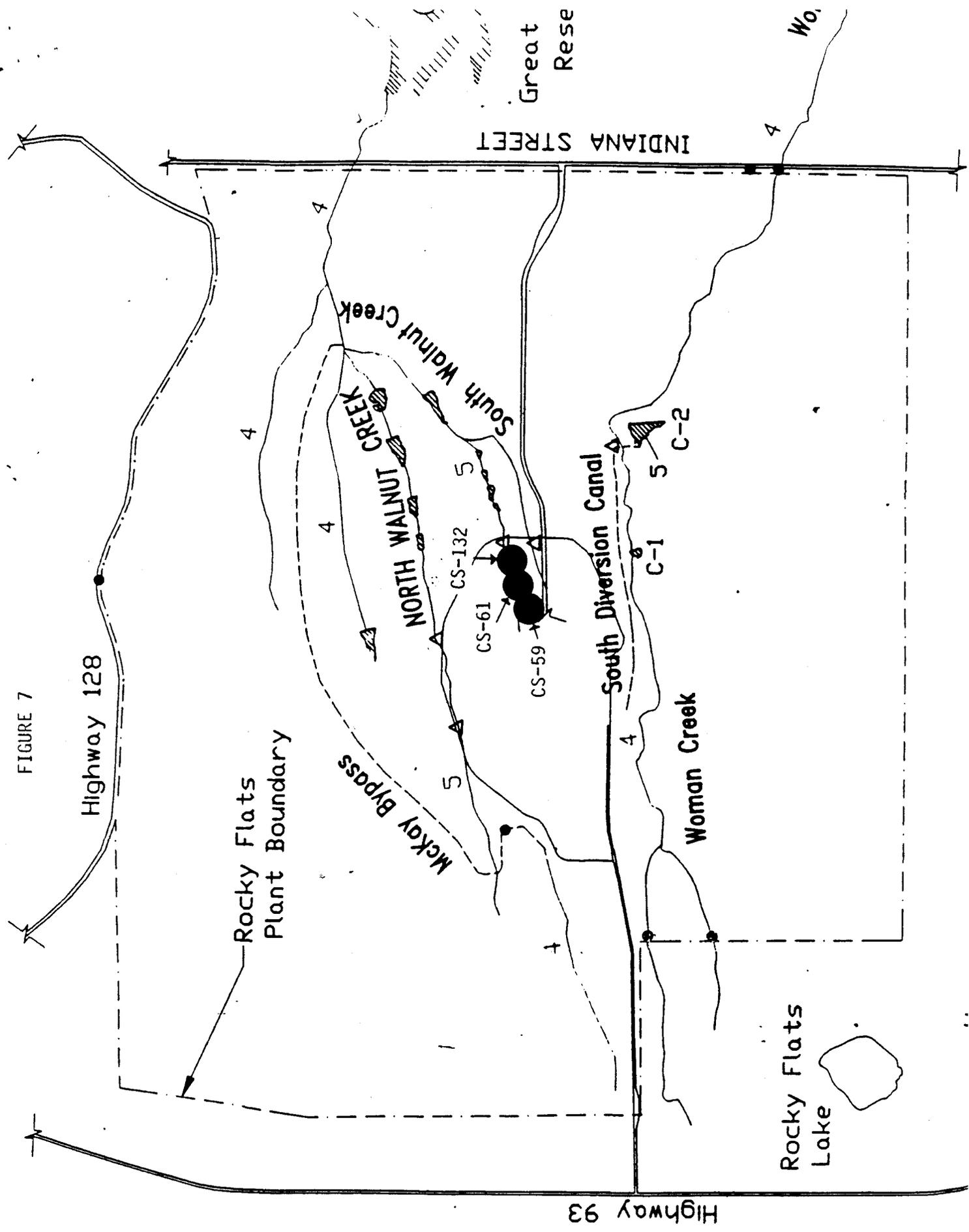


FIGURE 7



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